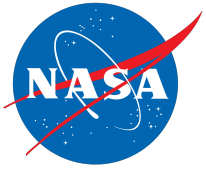




PDS4 Software Update

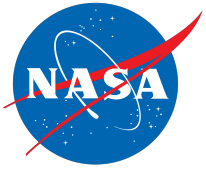
PDS Management Council Face-to-Face
Tucson, Arizona
April 10-11, 2014

Sean Hardman



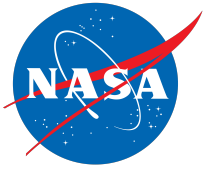
Topics

- Overview
- Deployment Status
- Build 4b
- Special Topics
 - Issue Tracking
 - Reporting
 - Data Set Source
 - Securing PDS4 Services
- Build 5a and Beyond
- Next Steps



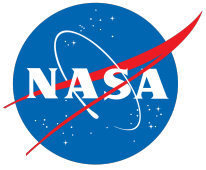
Overview

- Build 4a
 - Deployed to EN operations in February after ORR Board approval.
 - Node deployment underway.
- Build 4b
 - Delivered on March 31, 2014.
 - Currently undergoing integration and test.



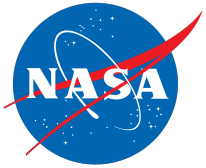
Deployment Status

- Node deployments of Build 4a started in February with Atmospheres.
- PPI, SBN, Geosciences, Rings and Imaging were invited to perform the deployment in March.
- Atmospheres and Geosciences have completed deployment of the core components.
- Some are in progress, others haven't started and a couple have yet to be asked.
 - Those who haven't started should deploy Build 4b software moving forward.



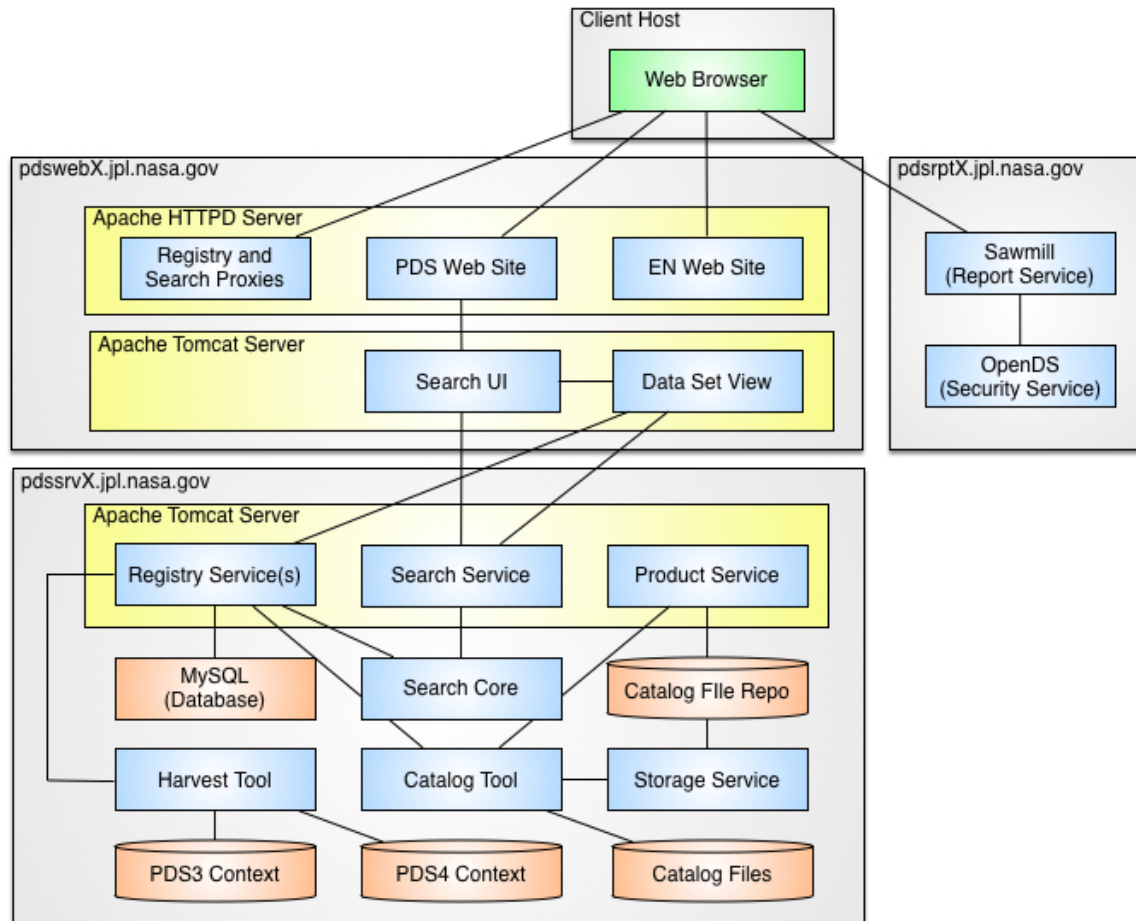
Build 4b Summary

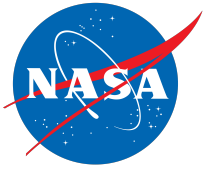
- Modifications to keep pace with changes occurring in the PDS4 data model.
- Harvest Tool and Validate Tool were modified to provide support for xinclude statements within product labels.
- Transform Tool was modified to streamline the API for use by other services.
- Search modified to better handle PDS4 context products and the PDAP protocol.



Build 4b

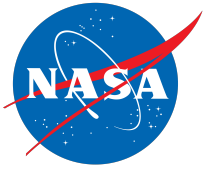
EN Deployment





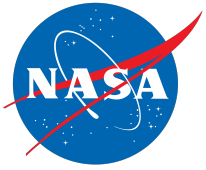
Issue Tracking

- A separate JIRA project has been created for PDS software:
 - <https://pds-jira.jpl.nasa.gov/browse/SW>
- This instance will track high-level issues and requests originating from outside the EN.
- EN will continue to utilize our internal instance for tracking our specific activities.
- Current RFA's need to be evaluated for possible promotion to a tracked issue.
 - I'll need about a month to get these in order.



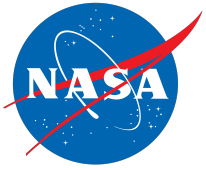
Reporting

- Sawmill software installed at the EN.
 - In the process of moving it to new hardware.
- Utilizing the service for web metric reports.
 - EN for the last two months.
 - Reports generated for IMG last month.
- Ready to start pulling and transform Node web logs for service population. Really.



Data Set Source

- As previously mentioned, there is duplication of PDS3 Data Sets among the PDS and PSA.
 - There are 259 to be exact.
- The immediate resolution was to remove the duplicates from the PSA registry and re-index.
- Support for displaying both has been implemented.
 - Search interface offers Agency facet to filter on PDS or PSA results.
 - Additional source identification in search results is under consideration.



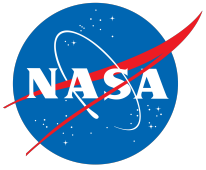
Data Set Source cont.

The screenshot shows the PDS Search Results page. The browser address bar displays the URL: `pds.nasa.gov/tools/data-search/search.jsp?q=GIO-C-IMS-3-RDR-HERS-HALLEY-V1.0`. The page header includes the NASA logo, the text "PDS: The Planetary Data System", and a search bar. The main navigation bar contains links: HOME, ABOUT PDS, DATA, TOOLS & DOCUMENTS, RELATED SITES, CONTACT US, and CITING PDS DATA. Below this is a secondary navigation bar with links: Data Search, How to Search, Data Set Status, and Data Release Summary. The search results section is titled "Search Results" and shows the query "GIO-C-IMS-3-RDR-HERS-HALLEY-V1.0" with a "Search" button and a "New Search" link. Below the search bar, it indicates "1-2 of 2 results (0.024 seconds)". A yellow box titled "Data Sets and Information" contains two data sets:

- Data Set: GIOTTO ION MASS SPECTROMETER HIGH ENERGY RANGE DATA V1.0**
GIOTTO Ion Mass Spectrometer (High Energy Range) observations of 1P/Halley
GIOTTO - GIO-C-IMS-3-RDR-HERS-HALLEY-V1.0 - starting 1985-07-02T00:00:00Z
- Data Set: GIOTTO ION MASS SPECTROMETER HIGH INTENSITY DATA V1.0**
GIOTTO Ion Mass Spectrometer (High Intensity) observations of 1P/Halley
GIOTTO - GIO-C-IMS-3-RDR-HIS-HALLEY-V1.0 - starting 1985-07-02T00:00:00Z

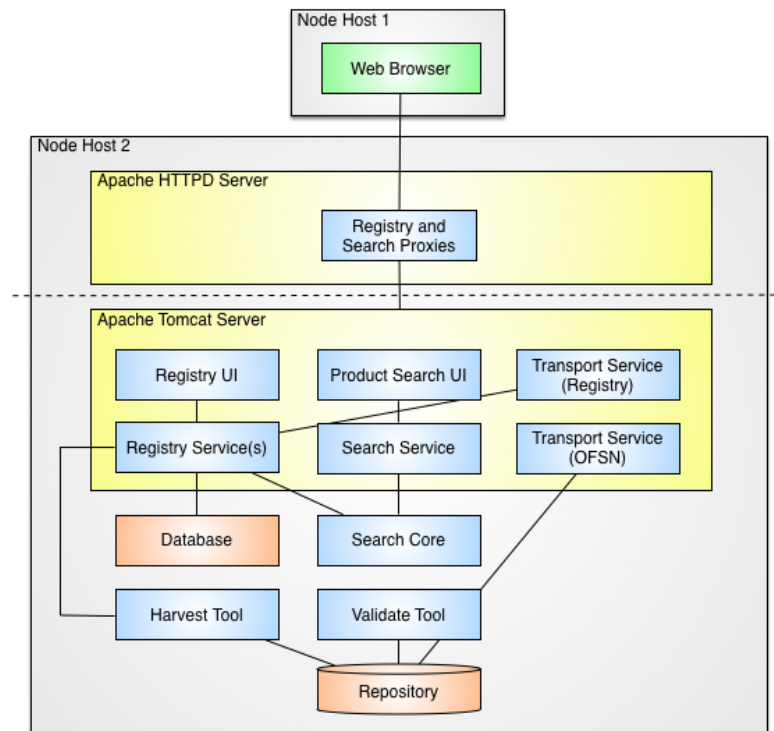
A red arrow points to the "Refine Your Search" box, which states "No further refinements available".

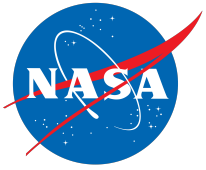
Agency facet appears
if results include
PDS and PSA hits



Securing PDS4 Services

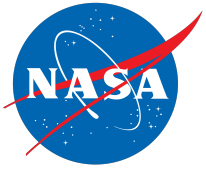
- Looking to provide a few options.
- Services can be secured within Apache Tomcat, but it does complicate the installation and operation.
- The preferred method is to secure via reverse proxy from an Apache HTTP server.





Build 5a and Beyond

- Continue to support data model changes.
- Add support for additional transformations.
- Add support for content validation.
- Add support for visualization.
- Better integrate search results with available tools and services.
- Get the Tracking Service underway.
 - This is where archive status and certification status will reside for PDS4 bundles/collections.



Next Steps

- Work with the Nodes on Report Service population.
- Work with the Nodes to deploy the PDS4 software locally.
 - Start registering some stuff.
- Build 5a Development
 - Focus on product-level support including content validation, search, transformation and visualization.

Questions/Comments